

CLAIMS

1. A polyvalent carboxylic acid ester which is a trivalent or greater valent carboxylic acid ester and which has, within one molecule, two or more organic groups represented by the following formula (1) and an organic group represented by the following formula (2):



wherein each R^1 independently represents H or CH_3 ;



- wherein R^2 represents an organic group derived from a compound having an aromatic ring and a hydroxyl group within one molecule.

2. A polyvalent carboxylic acid ester according to claim 1, which is an ester of a polyvalent carboxylic acid selected from the group consisting of 1,3,5-benzenetricarboxylic acid, 1,2,4-benzenetricarboxylic acid, 1,2,3-propanetricarboxylic acid, 1,2,4,5-benzenetetracarboxylic acid and 1,2,3,4-butanetetracarboxylic acid.

3. A process for producing a polyvalent carboxylic acid ester as set forth in claim 1 or 2, comprising the following Step A:

Step (A)

- a step of performing a transesterification reaction between at least one polyvalent (meth)allyl ester derived from a trivalent or greater valent carboxylic acid and one or more hydroxyl group-containing compounds containing, as an essential component, a compound having an aromatic ring and a hydroxyl group within one molecule, in the presence of a catalyst to obtain a polyvalent carboxylic acid ester as set forth in claim 1 or 2.

4. A process according to claim 3, wherein the catalyst is selected from the group consisting of tetraisopropyl titanate, tetra-n-butyl titanate, dibutyltin oxide, dioctyltin oxide, hafnium acetylacetonate and zirconium acetylacetonate.

5. A process for producing a polyvalent carboxylic acid ester as set forth in claim 1 or 2, comprising the following Step B:

Step (B)

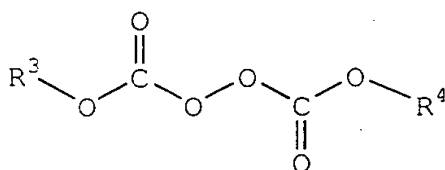
a step of performing a esterification reaction between at least one member selected from the group consisting of trivalent or greater valent carboxylic acids and anhydrides thereof, and a hydroxyl group-containing compound containing, as essential components, an allyl alcohol and/or a methallyl alcohol and a compound having an aromatic ring and a hydroxyl group within one molecule, in the presence of a catalyst to obtain a polyvalent carboxylic acid ester as set forth in claim 1 or 2.

6. A process according to claim 5, wherein the catalyst is selected from the group consisting of p-toluenesulfonic acid, methanesulfonic acid, sulfuric acid and hydrochloric acid.

7. A plastic lens composition comprising, as an essential component, a polyvalent carboxylic acid ester as set forth in claim 1 or 2.

8. A plastic lens composition according to claim 7, further comprising at least one radical polymerization initiator in an amount of 0.1 to 10 parts by mass per 100 parts by mass of whole curable components in the plastic lens composition.

9. A plastic lens composition according to claim 8, wherein the radical polymerization initiator is selected from the compounds represented by the following formula (33):



(33)

wherein R³ and R⁴ each independently represents a group selected from the group consisting of an alkyl group having from 1 to 10 carbon atoms, a substituted alkyl group, a phenyl group and a substituted phenyl group.

10. A plastic lens composition according to any one of claims 7 to 9, which has a viscosity at 25°C of not more than 1,000 mPa·s.

11. A plastic lens obtained by curing a plastic lens composition as set forth in any one of claims 7 to 10.

12. A process for producing a plastic lens, comprising curing a plastic lens composition as set forth in any one of claims 7 to 10.

13. A process according to claim 12, wherein the plastic lens composition is cured by casting polymerization at a curing temperature of 30 to 120°C for a curing time of 0.5 to 100 hours.